

**Remarks/Arguments****Summary of Telephone Interviews**

Applicant thanks the Examiner for extending the courtesy of two telephone interviews to discuss proposed amendment to the application. In the first interview Applicant referred to his Exhibit B that was a modification of Examiner's Exhibit A (mark-up of Eriksson Patent 3,594,932). Exhibit B was filed together with the subject RCE application to respectfully challenge the Examiner's position as stated in the previous Final Office Action that Eriksson's cross member contacted the middle of the platform. Applicant also withdrew his erroneous statement that the Examiner had relocated the pivot point of the pivot arms in the Examiner's Exhibit A.

In the interview the Examiner restated his position that the invention was obvious in view of Eriksson and Pipkin (2,930,152) and that "middle" was not defined clearly enough to preclude reading the claim on Eriksson.

In the second interview Applicant submitted further proposed amendments including a definition of "middle" and submitted Exhibit C which was a marked-up copy of Eriksson's Figs. 1 and 4. A copy of Exhibit C is appended hereto and will be discussed below. Applicant also proposed amendments intended to clarify operation when transporting and balancing a load on said middle when the platform is between the wheels and level above the ground. After reconsidering the proposal, the Examiner reiterated his position that the invention was obvious in view of Eriksson and Pipkin.

**Summary of Amendments to the Claims**

The claims have been carefully reviewed and amended to not only include the proposals previously advanced, but also to recast the claim structure more clearly defined as an "improvement" in accordance with 37 C.F.R. 1.75 (e). Rule (1.75 (e) (1) requires a "preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known". The preamble of independent claim 8 has been amended to more clearly recite the known prior art as exemplified in Fig. 10 of Hall Patent 5,810,543 (of record) and Fig. 1 of Pipkin Patent 2,930,152 (of record), the new amendments being as follows:

- (1) the preamble defines a middle substantially midway between said toe end and said

heel end of the platform,

(2) the "included angle" about the heel end between platform and rear wall "on the order of 120°" recited in dependent claim 2 has been moved to the preamble, such an included angle being shown in Fig. 10 of Hall and Fig. 1 of Pipkin. Accordingly, claim 2 has been canceled.

(3) the rear wall of the barrow body has been more clearly defined in the preamble as extending rearwardly, as well as upwardly, from the heel end of the flat platform, such a structure being shown in Fig. 10 of Hall and Fig. 1 of Pipkin,

(4) the pivot arms for the gate have been recited as "closure member pivot arms" to distinguish them from the "wheel pivot arms" and to provide antecedent basis for them in claims 5 and 6, and

(5) The word "improvement" has been substituted for "combination" to provide antecedent basis for the phrase "wherein the improvement comprises", pursuant to Rule 1.75 (e) (2).

Those elements, steps and/or relationships which constitute that portion of the claimed combination which applicant considers as the new or improved portion are recited in claim 8 after the phrase "wherein the improvement comprises", and in the dependent claims 3 and 5-7. Claim 8, as amended, refers to "said middle" which is defined in the preamble.

Claims 3 and 5-7 are amended to substitute the word "improvement" for "combination". Reconsideration of the rejection of claims 3, 5-7 and 8 is respectfully requested in light of the following arguments.

### **Background of the Invention**

The basis for the new amendments to the claims is better understood by repeating the Background of the Invention from the Specification, making it clear that the present invention is an improvement over known prior art, which eliminates problems in a known device.

The invention relates to improvements in a known type of convertible barrow for ground level loading and more particularly to an improved placement of the pivoting carriage in an optimum location along with an improved retaining gate which is easy to manipulate.

A known type of convertible barrow for ground level loading is disclosed in reexamined U.S. patent numbers 5,593, 271 issued January 14th, 1997, and in U.S. patent No. 5,810,543 issued September 22nd, 1998, both in the name of John R. Hall. In the foregoing Hall patents, a pivoting wheel carriage is mounted so as to pivot from a first position in which the wheels rest on the ground behind a flat platform to a second position in which the wheel carriage cross member is disposed at the midsection of the flat platform so as to support the load. The location of the pivot point body of the Hall convertible barrow is such that the barrow must be tilted at an excessive angle for the wheels to pivot. Also in the Hall patent, a retaining gate is used to close the open end of the barrow, sliding between channel members mounted on opposing sidewalls. This sliding gate requires the user difficulty to manipulate it into the channels.

A number of devices are shown in the prior art that are convertible between a snow scoop, which also has wheels so as to be convertible into a handcart. In the snow-scooping mode, handles are used to push up the shovel against the snow so that it enters the open end of the container. When converted into a garden cart, these devices include wheels that are moved into position to support the contents of the cart. U.S. patent 3,594, 932 issued July 27th, 1971 to Eriksson discloses a container with a pivotably mounted carriage in which the wheel axle contacts the rear wall of the container so that it can be transported by tilting the handles downwardly to lift it slightly off of the ground. Eriksson has no retaining gate nor do the wheels pivot to rest under the flat section of the body that rests on the ground.

U.S. patent 5,123, 187 issued in June 23rd, 1992 to Zamaria describes a combined snow scoop and multipurpose handcart with a pivoting gate operated by a tether attached to the handle. A pair of wheels are foldable on hinges attached to the sidewalls. When the scoop is resting flat on the ground, the wheels are suspended in the air. There is no cross member beneath the platform supporting the load, so that the load is carried in torsion by the hinges.

U.S. patent 2, 930, 152 issued March 29th, 1960 to Pipkin describes a wheeled shovel with a pivoting wheel carriage mounted on a pivot bracket attached beneath the handle, so that the wheels can unfold from a retainer on the handle to a location beneath the container. A pivoting gate mounted on arms attached to the side of the container swings

between a closed position in front of the container to an open position at the rear of the container. The wheel carriage along with the wheels is entirely below the container platform and the device is unsuitable for ground level loading.

#### **Claim Rejections under 35 U.S.C. § 103(a)**

Claims 8, 3, 5, and 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Eriksson in view of Pipkin.

As to claim 8, as currently amended, Eriksson discloses the elements identified by the Examiner in the last Office Action, except that Eriksson does not disclose

(1) "a rear wall extending upwardly and rearwardly from the heel end of the flat platform to form an included angle with said platform on the order of 120°", nor does Eriksson disclose

(2) a cross member movable to a "third position in which said cross member contacts said middle of said platform so as to support and enable balancing a load on said middle when the platform is between said wheels and level above the ground., nor does Eriksson disclose

(3) the recited structure of claim 8, wherein first pivot points on the body are located substantially equidistant from the carriage cross member in each of the first, second and third positions, nor does Eriksson disclose

(4) a gate for retaining a load when the barrow is tilted.

As to claim 3, Eriksson does not disclose a barrow wherein first pivot points are located along a vertical line drawn from a point on the platform that is one quarter of the distance from the heel end to the toe end of the platform.

Exhibit C is a marked-up drawing of Figs. 1-5 of Eriksson showing the various functional modes of Eriksson's combined snow plow and garden cart. Fig. 1 shows the plow lying on the ground. The "front bottom portion of the plow extends substantially parallel to the ground and lies against the ground." (Abstract). This corresponds to Applicant's "substantially flat platform arranged to rest flat on the ground, the platform having a toe end and a heel end and a middle substantially midway between said toe end and said heel end". These elements have been identified in Exhibit C, Fig. 1. The remainder of Eriksson's container consists of a gently rounded rear section curving from a horizontal

orientation to a vertical orientation at the top.

Fig. 2 of Eriksson shows the plow being slightly raised, so that it can be rolled over the ground. This corresponds to Applicant's Fig. 5 with the cross member in the first position for transporting the barrow in the unloaded condition.

Fig. 3 of Eriksson shows the wheels being swung to a different position with the cross member contacting the rounded part of the plow some distance from the "front bottom portion of the plow". Clearly this new position of Eriksson's cross member is not in the middle of Eriksson's platform. Fig. 4 shows the plow "resting on downwardly clamped springs, the plow being located at a substantially high distance from the ground."

Fig. 4 has been marked up to show the location of the middle of the platform and how the new cross member position fails to meet the recitation of claim 8. Fig. 4 also illustrates that the platform must be elevated and tilted back from a level position in order to balance the load in the rounded belly of the barrow. This is the desired loaded position for transporting a load. "In this position with the wheels swung downwardly and forwardly (FIG. 4), the center of gravity of the containerlike plow lies approximately above the wheel axle 50." (Col.2, lines 48-51).

If a load is confined to the middle of the platform (or front bottom portion of Eriksson's plow, a study of Fig. 4 makes it clear that downward force must be applied to the barrow handles to balance the weight of a load on the flat platform portion of Eriksson's barrow, the greater the load, the greater the downward force. In other words, Eriksson teaches away from the known prior art and operation of the Hall patent in transporting a load on the flat platform...

Pipkin is cited to show a barrow including a gate (70) for retaining a load when the barrow is tilted. Applicant admits that Pipkin's gate includes the elements recited in claim 8 and in dependent claims 5 and 6. However it is also pointed out that Pipkin describes a "wheeled shovel" with a sharp point for digging and the shovel is transported in the **inclined** position shown in Fig. 1 after the wheels are swung into position. Therefore the gate (70) is absolutely necessary **during transport of the load**. On the other hand, applicant's gate is primarily to retain the load **during the short period** when the platform is tilted on the toe end in order to enable conversion from the loading position flat on the ground to the transporting position of the barrow. As recited at the end of claim 8, the gate is "pivotable about said second pivot points from an open position above the rear wall to a closed position on the toe end of the platform to retain said load as said body is

tilted on the toe end of said platform enough to allow said cross member to pivot from said first position to said third position". There is no suggestion in Pipkin that swinging of the wheels is coordinated with operation of the pivotable gate as taught by the applicant.

Claims 8, 3, 5, and 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Eriksson in view of Pipkin. Yet Eriksson lacks four key structural elements enumerated above. Only one of these, a pivotable gate, is suggested by Pipkin. It is submitted that the two references, when combined, are not sufficient to enable one skilled in the art to arrive at the improvement over the prior art recited in claims 8, 3, 5 and 6. Eriksson only suggests contacting the rounded back end of a snow shovel to enable rolling it in the unloaded state and swinging the wheels to a loaded position that does not permit carrying the load on a level flat platform in a balanced state. Pipkin only suggests a pivotable gate used for supporting part of the load while transporting it on an inclined platform. These suggestions are insufficient to render the improvement obvious, wherein a front loaded level platform is tilted through a minimum tilt angle by the recited structure using pivot points equidistant from the cross member in its three defined positions while a pivotable gate retains the load during the tilting operation.

Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Eriksson in view of Pipkin and further in view of Zamaria (of record)

Applicant's position previously stated above is that Eriksson in view of Pipkin does not disclose all of the elements of the claimed invention. Applicant admits that Zamaria discloses a latching mechanism to hold a pivotable gate temporarily in an open position. However, claim 7 is dependent on claim 8, which for the reasons stated above is believed to be patentable over Eriksson in view of Pipkin.

### Summary

1. The applied references do not, standing alone, render the invention obvious to one skilled in the art, because, when applied in combination, they still fail to disclose all of the claimed features and together do not suggest how they might be combined to arrive at the claimed invention.

2. The claims have been amended to more clearly define the invention as an **improvement over known prior art** which is completely recited in the preamble, and thereafter recites the improvement as a combination of features which are not supplied or suggested by the teachings of the applied references-Eriksson, Pipkin and Zamaria.

3. The invention has been recited to clearly define a structure which patentably improves over the basic Hall patents by adding a new function of operation by way of unobvious adjustment of basic parameters to provide minimum tilt angle, inclined rear wall to facilitate transport of the barrow in an unloaded condition, pivotable gate to be closed to steady the load during such minimum tilt and which also permits ground level loading of tall objects when open.

Reconsideration of the rejection of claims 3, 5-7 and 8, as amended, is respectfully requested and it is asked that the case be passed to issue.

Respectfully,

  
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**Encl: Exhibit C**